## INTERNATIONAL SEARCH REPORT

PCT/EP2005/000090

a. classification of subject matter G06F19/00 G01N33/68

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, MEDLINE, BIOSIS, EMBASE

C. DOCUM	INTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 100 38 694 A (ANAGNOSTEC GES FUER ANALYTISCH) 14 February 2002 (2002-02-14) whole document, in particular paragraphs 0019 and 0021.	1,7,9-24
<b>A</b>	VAIDYANATHAN SEETHARAMAN ET AL: "Flow-injection electrospray ionization mass spectrometry of crude cell extracts for high-throughput bacterial identification."  JOURNAL OF THE AMERICAN SOCIETY FOR MASS SPECTROMETRY. UNITED STATES FEB 2002, vol. 13, no. 2, February 2002 (2002-02), pages 118-128, XP002273858 ISSN: 1044-0305 whole document, in particular, p.120, right col., first 2 paragraphs and table 3.	1,7,9-24

"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date \( \) "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	<ul> <li>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>"&amp;" document member of the same patent family</li> </ul>		
Date of the actual completion of the international search	Date of mailing of the international search report		
13 July 2005	2 3 12. 2005		
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  Lüdemann, S		

# INTERNATIONAL SEARCH REPORT

Inter Application No
PCT/EP2005/000090

215	A DOCUMENTO CONSIDERACE TO BE BEI FURNIT	<u> </u>
C.(Continu	ation) DOCUMENTS CONSIDERED TO BE RELEVANT  Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
-alagoly	Oncorn St Goodingto, Will indication, Willow appropriate, of the felevals passages	The section of the se
X	PEVZNER PAVEL A ET AL: "Efficiency of database search for identification of mutated and modified proteins via mass spectrometry" GENOME RESEARCH, vol. 11, no. 2, February 2001 (2001-02), pages 290-299, XP002273859 ISSN: 1088-9051 the whole document	1,7,9-24
<b>X</b>	WILKES JON G ET AL: "Defining and using microbial spectral databases." JOURNAL OF THE AMERICAN SOCIETY FOR MASS SPECTROMETRY. UNITED STATES JUL 2002, vol. 13, no. 7, July 2002 (2002-07), pages 875-887, XP002273860 ISSN: 1044-0305 the whole document	1,7,9-24
Ρ,Χ	WO 2004/008371 A (APPEL RON ;HERNANDEZ PATRICIA (CH); INST SUISSE DE BIOINFORMATIQUE) 22 January 2004 (2004-01-22) the whole document	1,7,9-24

International application No. PCT/EP2005/000090

## INTERNATIONAL SEARCH REPORT

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
see additional sheet
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  1, 7 (partially), 9-24 (partially)
Remark on Protest  The additional search fees were accompanied by the applicant's protest.  No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1, 7 (partially), 9-24 (partially)

A method of providing a representative, non-redundant overview of the peptide content of a sample type by analyzing a plurality of samples using its peptide topology, wherein the method comprises the steps a)-b) as listed in claim 1

2. claims: 2,3, 7 (partially), 8-24 (partially)

A method of predicting the sequence of proteins comprising the steps a)-e) of claim 2

3. claims: 4-6,7 (partially), 8,9-24(partially)

A method for identifying peptides suitable to be used as marker panels or surrogate for a known peptide as defined by claims 4-6, wherein the last step c) or d) comprises: (i) selecting pairs of potential peptides, which exhibit a difference in the degree of correlation between the experimental groups, or (ii) no correlation of their respective signal intensities, or (iii) which exhibit a degree of correlation with a known peptide above a certain threshold.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

Inte I Application No
PCT/EP2005/000090

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
DE 10038694	Α	14-02-2002	EP	1253622 A1	30-10-2002
WO 2004098371	Α	22-01-2004	AU EP JP	2002345287 A1 1520243 A1 2005532565 T	02-02-2004 06-04-2005 27-10-2005